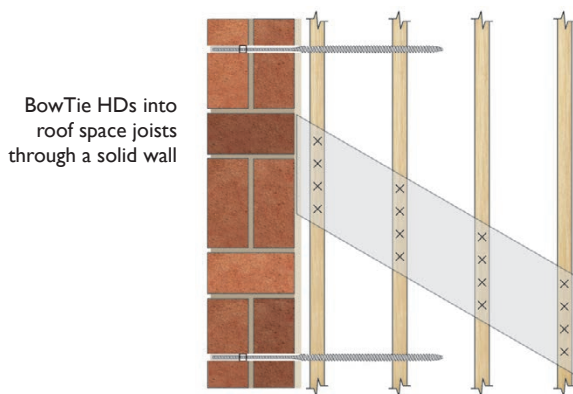
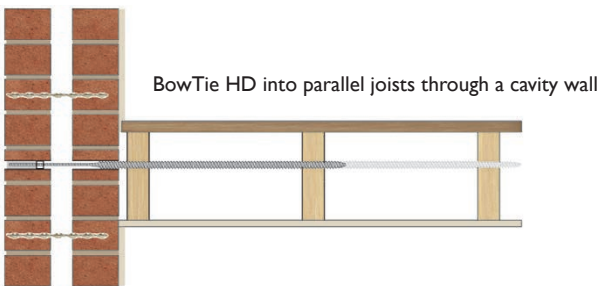
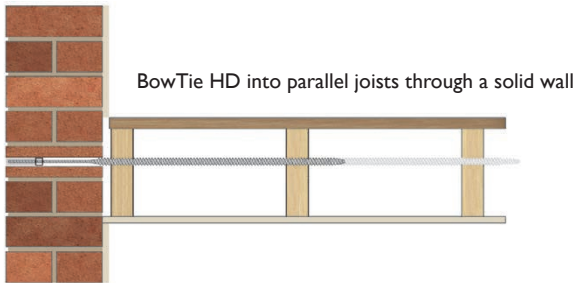


BowTie HD

Remedial ties for restraining bowed walls



Applications

- For stabilizing bowed external building walls by securing them to internal floor and ceiling joists
- BowTie HDs are recommended when installing into joist sides

Features

- Quick, easy, non-disruptive external installation
- Self-tapping design – no splitting of wood
- Effective in all common wall materials
- Suitable for hardwood use
- Easily tested for security of anchoring
- Fully concealed – no unsightly external plates



BowTie HDs installed through parallel floor joists



For full Product Information, Case Studies and downloadable Repair Details, giving specifications for many common structural faults, go to:

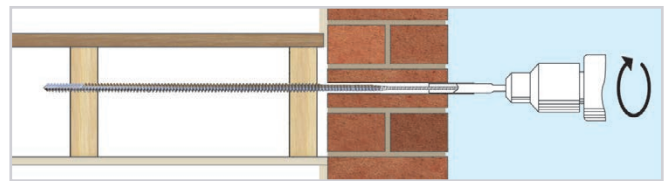
www.helifix.com/products/retrofit-products/bowtie_hd_helical_anchor/

Installation Procedures

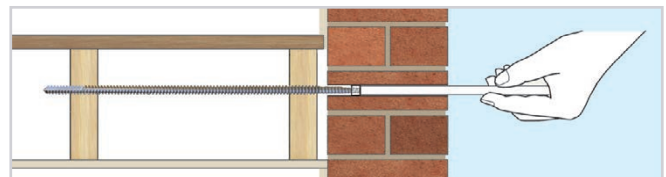
1. Mark the positions of the joists on the external wall.
2. Drill clearance holes normally $\frac{5}{8}$ " **through the masonry only**, in line with the centre of the joists.
3. Clean out the hole to clear any dust or debris.
4. Fit the power support tool into an SDS rotary hammer drill and insert the BowTie HD.
5. Install the BowTie HD (with hammer off) into and through the first and second joists (and third joist, if specified). When the BowTie HD is between joists, take care to avoid 'whip'.
6. Fit the sleeve over the tie and push it to the back of the hole in the masonry with the BowTie Injection Tube.
7. Inject Helifix HeliBond grout into the hole to fill it completely.
8. Allow the grout to gel (normally 15 to 20 minutes).
9. Make good all holes at the surface with brick dust or matching mortar or leave ready for any decoration.



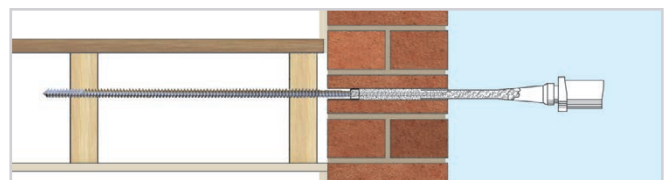
1. Mark the position of the joist centre on the external wall and then drill a clearance hole (normally $\frac{5}{8}$ ") through the wall. Clean out the hole



2. Fit the BowTie HD Support Tool to an SDS rotary hammer drill, insert the BowTie HD and drive it (off hammer) into, and through, the first and second joists



3. Fit the plastic sleeve over the BowTie HD and use the support tool to push it to the back of the hole in the wall (outer wythe in a cavity wall)



4. Inject HeliBond grout to fill the hole and bond the BowTie HD to the masonry, allow the resin to gel and then make good

Technical Specifications

Material:	Austenitic stainless steel Grade 304
Diameter:	12mm
Length:	Thickness of the wall + any cavity + sufficient to drive into the second parallel joist (or third where specified)
Standard lengths:	1m and 1.5m – in packs of 5
Diameter of masonry clearance hole:	$\frac{5}{8}$ "
Fixing density:	Maximum horizontal spacing of 24" between BowTies
Bonding agent (facade only):	HeliBond grout
RECOMMENDED TOOLING	
For drilling clearance holes and insertion of BowTie HDs:	SDS rotary hammer drill
For installation of BowTie HDs:	BowTie HD driver
For injection of HeliBond grout:	Helifix Pointing Gun Kit